



## Proposed Regulation Agency Background Document

<b>Approving authority name</b>	State Air Pollution Control Board
<b>Primary action</b>	Article 8, 9 VAC 5-80
<b>Secondary action(s)</b>	Article 4, 9 VAC 5-50; Articles 6 and 9, 9 VAC 5-80
<b>Regulation title</b>	Regulations for the Control and Abatement of Air Pollution
<b>Action title</b>	Major New Source Review Reform (Revision E03)
<b>Document preparation date</b>	March 4, 2005

This information is required for executive review ([www.townhall.state.va.us/dpbpages/apaintro.htm#execreview](http://www.townhall.state.va.us/dpbpages/apaintro.htm#execreview)) and the Virginia Registrar of Regulations ([legis.state.va.us/codecomm/register/regindex.htm](http://legis.state.va.us/codecomm/register/regindex.htm)), pursuant to the Virginia Administrative Process Act ([www.townhall.state.va.us/dpbpages/dpb\\_apa.htm](http://www.townhall.state.va.us/dpbpages/dpb_apa.htm)), Executive Orders 21 (2002) and 58 (1999) ([www.governor.state.va.us/Press\\_Policy/Executive\\_Orders/EOHome.html](http://www.governor.state.va.us/Press_Policy/Executive_Orders/EOHome.html)), and the *Virginia Register Form, Style and Procedure Manual* ([http://legis.state.va.us/codecomm/register/download/styl8\\_95.rtf](http://legis.state.va.us/codecomm/register/download/styl8_95.rtf)).

### Brief Summary

*Please provide a brief summary of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation. Do **not** state each provision or amendment or restate the purpose and intent of the regulation.*

Article 8 establishes a new source review (NSR) permit program whereby owners of sources locating in prevention of significant deterioration (PSD) areas are required to obtain a permit prior to construction of a new facility or modification (physical change or change in the method of operation) of an existing one. Article 9 establishes an NSR permit program whereby owners of sources locating in nonattainment areas are required to obtain a permit prior to construction of a new facility or modification of an existing one.

Articles 8 and 9 apply to the construction or reconstruction of new major stationary sources or major modifications to existing ones. The owner must obtain a permit from the board prior to the construction or modification of the source. The owner of the proposed new or modified source must provide information as may be needed to enable the board to conduct a preconstruction review in order to determine compliance with applicable control technology and other standards, and to assess the impact of the emissions from the facility on air quality. The regulation also provides the basis for the board's final action (approval or disapproval) on the permit depending on the results of the preconstruction review.

Article 8 requires a facility to use the best available control technology (BACT) to control emissions from the proposed facility, and requires a facility to control emissions from the proposed facility such that the

air quality standards or increments are not violated. Article 9 requires a facility to use the lowest achievable emission rate (LAER) as the limit to control emissions from the proposed facility, and requires the facility to obtain emission reductions from existing sources to offset the proposed project's emissions increases.

EPA's new major NSR reform rule incorporates five main elements: (i) changes to the method for determining baseline actual emissions; (ii) changes to the method for determining emissions increases due to operational change; (iii) provisions to exclude pollution control projects (PCPs) from NSR; (iv) provisions for determining applicability of NSR requirements for units designated as Clean Units; and (v) provisions to allow for compliance with plantwide applicability limits (PALs). The current state NSR regulations have been amended in order to meet these new requirements; additionally, the minor NSR regulation (Article 6) has been revised to remove provisions for PCPs that will be covered by the changes to the major NSR regulations.

In addition, Article 8 has been revised in order to be consistent with other NSR regulations. This consists of (i) removing federal enforceability of certain provisions that should be enforceable by the state (toxics and odor) in order to prevent state-only terms and conditions from being designated as federally enforceable in a permit; (ii) deleting provisions covered elsewhere regarding circumvention, and reactivation and permanent shutdown; and (iii) adding provisions regarding changes to permits, administrative permit amendments, minor permit amendments, significant amendment procedures, and reopening for cause. Finally, Article 4 of 9 VAC 5 Chapter 50, which contains general requirements for new and modified stationary sources, has been revised to be consistent with the control technology provisions of Articles 8 and 9.

## Legal Basis

*Please identify the section number and provide a brief statement relating the content of the statutory authority to the specific regulation proposed. Please state that the Office of the Attorney General has certified that the agency has the statutory authority to promulgate the proposed regulation.*

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Section 10.1-1308 of the Virginia Air Pollution Control Law (Title 10.1, Chapter 13 of the Code of Virginia) authorizes the State Air Pollution Control Board to promulgate regulations abating, controlling and prohibiting air pollution in order to protect public health and welfare. Written assurance from the Office of the Attorney General that the State Air Pollution Control Board possesses the statutory authority to promulgate the proposed regulation amendments is available upon request.

## Purpose

*Please provide a statement explaining the rationale or justification of the proposed regulation as it relates to the health, safety or welfare of citizens.*

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The purpose of the regulations is to (i) protect public health and welfare by enabling the department to determine whether a new or modified source will affect ambient air quality standards and PSD ambient air increments; (ii) require the owner of a proposed new or modified facility to provide such information as may be needed to enable the board to conduct a preconstruction review in order to determine compliance with applicable control technology and other standards and to assess the impact of the emissions from the facility on air quality and (iii) to provide the basis for the board's final action (approval or disapproval) on the permit depending upon the results of the preconstruction review. The proposed amendments are being made in order to provide the regulatory authority to implement the federal new source reform requirements of 40 CFR Part 51.

## Substance

*Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. (Provide more detail about these changes in the "Detail of changes" section.)*

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The following amendments apply to Articles 8 (PSD areas) and 9 (nonattainment areas):

1. Provisions for electric utility steam generating units (EUSGUs) have been added in order for the baseline state regulations to be consistent with the baseline federal regulations.
2. Requirements for determining whether physical changes made to existing emissions units trigger major NSR requirements have been revised. Sources establishing their baseline actual emissions may now use any consecutive 24-month period during the five-year period prior to the change to determine the baseline actual emissions.
3. The method for determining if a physical or operational change will result in an emissions increase has been revised. The previous "actual-to-potential" and "actual-to-representative-actual-annual" emissions applicability tests for existing emissions units have been replaced with an "actual-to-projected-actual" applicability test.

4. Provisions for pollution control projects (PCPs) have been added. A PCP is an activity, set of work practices, or project at an existing emissions unit that reduces air pollution. Obtaining a PCP exclusion relieves the PCP from major NSR review. These new PCP provisions replace the old PCP provisions of Article 6, which have been removed.

5. Provisions for Clean Units have been added. An emissions unit qualifies as a Clean Unit, and qualifies to use the Clean Unit control technology applicability test, if it has gone through major NSR permitting review and is complying with a BACT or LAER determination that has been subject to public participation. When a source undergoes NSR review and installs a BACT or LAER technology that has undergone public comment, it may make changes to a Clean Unit without triggering an additional major NSR review.

6. Provisions for plantwide applicability limits (PALs) have been added. A PAL is a voluntary option that allows a source to manage emissions without triggering major new source review. The PAL program is based on plantwide actual emissions. If the emissions are maintained below a plantwide actual emissions cap, then the facility may avoid major NSR permitting process when it makes alterations to the facility or individual emissions units.

The following amendments are limited to specific articles:

7. Article 8 has been revised in order to be consistent with other NSR regulations. This consists of (i) removing federal enforceability of certain provisions that should be enforceable by the state (toxics and odor) in order to prevent state-only terms and conditions from being designated as federally enforceable in a permit; (ii) deleting provisions covered elsewhere regarding circumvention, and reactivation and permanent shutdown; and (iii) adding provisions regarding changes to permits, administrative permit amendments, minor permit amendments, significant amendment procedures, and reopening for cause.

8. Article 4 of 9 VAC 5 Chapter 50, which contains general requirements for new and modified stationary sources, has been revised to be consistent with the control technology provisions of Articles 8 and 9.

## Issues

*Please identify the issues associated with the proposed regulatory action, including: (1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; (2) the primary advantages and disadvantages to the agency or the Commonwealth; and (3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please indicate.*

1. Public: Advantages to the regulated community include more certainty, as various long-standing EPA policies are now codified into the regulations, and more specifics as to what is and is not subject to major source NSR have been added. Added flexibility in business planning will be realized, as new projects that either have a positive or no negative impact on the environment can be implemented without undergoing costly and time-consuming NSR permitting. The general public will benefit from a reduction in the health and welfare effects of air pollution, as the new rules encourage the application of air pollution control equipment and work practices. While there is a slight immediate disadvantage to the public in that changes to a source may no longer be scrutinized through the traditional approach of a permitting analysis for every facility change, this disadvantage will be outweighed over time as focus will be shifted to activities with more significant impacts to the environment. This slight disadvantage will also be outweighed by the additional recordkeeping that sources will have to conduct in order to justify projects that are exempt from major source NSR.

2. Department: The department will benefit by diverting its limited resources to projects with a potentially significant impact to the environment rather than on projects with positive or neutral effects to the environment. Permitting resources will be diverted to projects with more of an impact on the environment. There may be a slight initial disadvantage to compliance and enforcement staff in that additional, closer scrutiny will be required of facility inspections and review; however, this will be outweighed over time as the system eliminates attention to less important programs and diverts it to areas that genuinely require greater scrutiny. The department will also benefit from the availability of additional recordkeeping that sources will have to conduct in order to justify projects that are exempt from major source NSR.

**Localities Particularly Affected**

*Please identify any locality particularly affected by the proposed regulation. Locality particularly affected means any locality which bears any identified disproportionate material impact which would not be experienced by other localities.*

The proposed regulation amendments affect sources located in areas designated as attainment (PSD) areas or nonattainment areas. Sources located in a PSD area are subject to Article 8; sources located in nonattainment areas are subject to Article 9 for the pollutants for which they are designated nonattainment. Currently, the following nonattainment areas are subject to Article 9 (the remainder of the Commonwealth is subject to Article 8) for the pollutants indicated:

1. Northern Virginia Ozone Nonattainment Area: Arlington County, Alexandria City, Fairfax County, Fairfax City, Loudoun County, Falls Church City, Prince William County, Manassas City, and Manassas Park City.
2. Northern Virginia PM<sub>2.5</sub> Nonattainment Area: Arlington County, Alexandria City, Fairfax County, Fairfax City, Loudoun County, Falls Church City, Prince William County, Manassas City, and Manassas Park City.
3. Fredericksburg Ozone Nonattainment Area: Spotsylvania County, Stafford County, and Fredericksburg City.
4. Hampton Roads Ozone Nonattainment Area: Gloucester County, Isle of Wight County, James City County, York County, Chesapeake City, Hampton City, Newport News City, Poquoson City, Portsmouth City, Norfolk City, Suffolk City, Virginia Beach City, and Williamsburg City.
5. Richmond Ozone Nonattainment Area: Charles City County, Chesterfield County, Hanover County, Henrico County, Prince George County, Colonial Heights City, Hopewell City, Petersburg City, and Richmond City.

Note that the Shenandoah National Park Ozone Nonattainment Area, which includes the portions of Madison County and Page County located in Shenandoah National Park, currently has no major stationary sources, and none are anticipated to be developed.

**Public Participation**

*Please include a statement that in addition to any other comments on the proposal, the agency is seeking comments on the costs and benefits of the proposal and the impacts of the regulation on farm or forest land preservation.*

In addition to any other comments, the department is seeking comments on the following specific issues:

1. The costs and benefits of the proposal.
2. Any impacts of the regulation on farm and forest land preservation.
3. Determining baseline emissions: should the lookback period be (i) any consecutive 24 months in the previous 10 years, as specified in the EPA rule, (ii) two years, as specified in the current state regulations; (iii) any consecutive 24 months in the previous five years; (iv) the average of previous ten years; (v) the highest one year of previous five years, (vi) an average of previous five years; (vii) the highest one year out of the most recent five years; (viii) the highest two years in five; or (ix) an alternative not listed here.
4. Consequences of exceeding projected emissions: what level of discretion is available to the state? Should such discretion be codified in the regulation? If so, how--a generic reference or specific steps?
5. Projected actual emissions: should the projected emissions resulting from the physical or operational change be differentiated from demand growth? How can these emissions be quantified, reported, or made enforceable? What level and specificity of recordkeeping and public accessibility are appropriate? For example, should the board be notified if demand growth or other adjustments to the calculation are needed to keep the change from triggering NSR? If so, how?
6. Should malfunctions be included or excluded in determining baseline actual emissions and projected actual emissions? What, if any, would be the potential effects of the federal malfunction provisions in the context of other state rules and requirements?
7. Should there be a requirement for sources to "net in" as well as net out?
8. Plantwide applicability limits (PALs): Should the baseline emissions for the PAL be the same as the baseline emissions for determining program applicability as described in issue 3? Should PAL duration be: (i) 10 years, as specified in the EPA rule; (ii) 5 years; or (iii) some other period?
9. Should PAL renewal be based on emissions at the time of the renewal or within some shorter lookback period? Should review of significant changes to the overall airshed and the potential affect on NAAQS or PSD increment be required?
10. Should pollution control projects (PCPs) include the "primary purpose" test (that is, should the explicit purpose of the PCP be to reduce air pollution)?
11. Clean units: Is additional specificity needed as to how "substantially as effective" is determined? Should sources not be allowed to use an alternative to a BACT/LAER analysis in order to qualify?

Anyone wishing to submit written comments for the public comment file may do so at the public hearing (see below) or by mail, email or facsimile transmission to Karen G. Sabasteanski, Policy Analyst, Office of Air Regulatory Development, Department of Environmental Quality, P.O. Box 10009, Richmond, Virginia 23240 (email: [kgsabastea@deq.virginia.gov](mailto:kgsabastea@deq.virginia.gov)) (fax number 804-698-4510). Written comments must include the name and address of the commenter. Comments by facsimile transmission will be accepted only if followed by receipt of the original within one week. Comments by email will be accepted only if the name and address of the commenter are included. All testimony, exhibits and documents received are matters of public record. In order to be considered comments must be received by 5:00 p.m. on the date established as the close of the comment period.

A public hearing will be held and the notice of the public hearing, along with the comment period closing date, can be found in the Calendar of Events section of the Virginia Register of Regulations. Both oral and written comments may be submitted at that time.

**Financial Impact**

*Please identify the anticipated financial impact of the proposed regulation and at a minimum provide the information specified below. Also include a description of the beneficial impact the regulation is designed to produce.*

In support of the regulatory changes, U.S. EPA prepared a “Supplemental Analysis of the Environmental Impact of the 2002 Final NSR Improvement Rules” (<http://www.epa.gov/nsr/documents/nsr-analysis.pdf>), which contained a detailed financial impact analysis. EPA’s conclusion was, generally, that a slight environmental benefit will be recognized from implementation of the NSR reform measures.

<p><b>a. Description of the individuals, businesses or other entities likely to be affected by the regulation</b></p>	<p>Any owner who constructs a new major stationary source or makes a major modification to any major stationary source.</p>
<p><b>b. Agency’s best estimate of the number of such entities that will be affected</b></p>	<p>The number, type, and size of sources to be affected by the revised regulation is impossible to predict, as such a prediction must approximate the need and ability of sources to make specific plant-by-plant modifications, which depend on local, national, and global economies as well as by a source’s individual plant-specific needs. These modifications may take place on a scale ranging from monthly to over a period of many years, and on a size ranging from a relatively small piece of equipment to a large and complex facility. Many of the reform provisions are voluntary in nature, and will vary greatly from source to source, from year to year.</p> <p>Very few major source NSR permits are issued. From 2000 to 2004, none were issued in nonattainment areas, and 18 in PSD areas. It is anticipated that a number of such sources, if they met the specific qualifications for participation, would have chosen to utilize the reform provisions of PCPs, PALs, and Clean Units had these options been available, or would perhaps not have been required to obtain a permit at all based on the new applicability requirements. Some existing major sources may view implementation of the NSR reforms as an opportunity to obtain PCPs, PALs or Clean Unit status, which may increase the initial number of sources opting to participate in the new program.</p> <p>The vast majority of permits issued are minor NSR permits: some 1500 from 2000 to 2004. A number of these permits were sought by sources wishing to avoid major source NSR--regional permitting staff estimate that 50-75% of permit actions would be major modifications if sources were not able to limit their emissions. Note, however, that although a</p>

	<p>project may avoid permitting under major NSR, it may still remain subject to other permitting rules, including minor NSR. It is therefore anticipated that the number of minor source permit actions will vary little as a result of implementation of the NSR reforms.</p> <p>It is anticipated that approximately 350 sources may be eligible to utilize the NSR reforms. Of these sources, some or all of them may avail themselves of some or all of the elements of the regulations. Because the new program elements are optional, it is unlikely that a source would participate if it would not be cost effective to do so. The ability to utilize certain elements of the regulations also depend on a source's ability to calculate and provide certain types of data over particular periods of time, to be capable of performing certain types of testing and monitoring, and many other requirements that a source may or may not be able to undertake.</p>
<p><b>c. Projected cost of the regulation for affected individuals, businesses, or other entities</b></p>	<p>Because it is not possible to determine the number of affected sources, it is also not possible to quantify projected costs. New source review is inherently case-by-case and source-by-source. Cost effectiveness, therefore, depends on the type of source, the type of control equipment required, and so forth. Sources locating in nonattainment areas must meet LAER, which is the lowest possible emission rate currently in use by a source anywhere in the country, regardless of cost. Sources locating in a PSD area must meet BACT, which takes into account variables such as cost effectiveness.</p> <p>The costs of this regulation for affected entities will depend entirely on the specific situation for each source. Costs will vary from source to source due to the size and complexity of each source. As mentioned above, participation in major NSR reforms will not necessarily exempt a source from minor NSR applicability; therefore, it is anticipated that very few current costs will change due to implementation of the NSR reforms.</p> <p>Bearing in mind the variability among the entities affected by the proposed regulation, an estimation of ongoing general costs is as follows:</p> <p>(1) <u>Costs of preparing a permit application and providing data to the agency so that the application can be evaluated</u> - The department's permit application parallels the federal requirements, which look at the changes from a source-wide perspective to determine applicability. The determination of applicability must look back at historical emissions changes in addition to the emissions changes directly</p>

	<p>resulting from the physical or operational change. Filling out a completely new permit application is considerably time-intensive for proposed new sources. However, each existing source now reports certain emissions and operational data to the department at specific intervals depending on the size of the source. This data is required to maintain the state's emissions inventory and to verify compliance with the regulations. For sources with fully permitted facilities, applying for a modification will mean organizing and verifying information already set out in the permits in effect for the source. While this effort may be time-consuming, it probably will not take as much effort as initially developing the data. The cost to prepare the permit application is approximately \$80,000, while the cost for an amendment is approximately \$4,200.</p> <p>(2) <u>Costs of determining LAER for new and modified sources</u> - Currently, a LAER evaluation must be conducted for an application for a nonattainment area permit. This requirement can be very time consuming for both the source and the department staff due to the inherent nature of LAER evaluation. The cost negotiating and implementing LAER varies, and is determined by the circumstances of the individual source.</p> <p>(3) <u>Costs of obtaining offsets</u> – The cost of obtaining an offset would depend on the size, emissions, market, and the availability of emissions reductions, which are in turn dependent on the various strategies that would be used to control existing sources once the areas are officially designated and attainment plans are developed.</p> <p>(4) <u>Costs of determining BACT</u> – Currently, a BACT evaluation must be conducted for an application for a PSD permit. A BACT determination takes into account technical and economic feasibility. The cost of negotiating and implementing BACT varies, and is determined by the circumstances of the individual source. Note that even if a source should be exempt from major NSR based on the new rules, it continues to be potentially subject to minor NSR permitting, which requires BACT. Therefore, there should be relatively little change in expenses currently incurred for making BACT determinations.</p> <p>(5) <u>Costs of fulfilling additional requirements such as testing, monitoring, and reporting</u> - The regulations provides that the department may require as part of a source's permit conditions that testing, monitoring or reporting be required. The costs for testing, monitoring, and reporting vary considerably from one source to another and from one pollutant to another.</p>
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	<p>These requirements are not new but are a reaffirmation of authority that exists elsewhere in the regulations. A single stack test for pollutants such as particulate matter, sulfur oxides, or nitrogen dioxide may cost anywhere from \$2,000 to \$10,000 per pollutant depending on the pollutant emitted, stack size, and complexity of the test required. Installing continuous emission monitors for a single point in a facility may cost anywhere from \$25,000 to \$150,000 per pollutant, without a data acquisition system. The cost of additional reporting requirements depends entirely on the specific requirement for the source.</p>
<p><b>d. Information on the impact on small businesses as defined in § 2.2-2279</b></p>	<p>The impact upon facilities that meet the definition of small business provided in § 2.2-2279 of the Code of Virginia is addressed in item c above.</p>
<p><b>e. Projected cost to the state to implement and enforce the proposed regulation, including (a) fund source / fund detail, and (b) a delineation of one-time versus on-going expenditures</b></p>	<p>It is expected that the state will realize a small cost benefit, as the program is intended to reduce the number of permits being processed and issued. While an initial increase in permit applications is expected, this and the concurrent workload will decrease as the program progresses in its implementation. There may also be a small initial increase in the amount and intensity of scrutiny required by compliance staff, as they must review the sources' demonstrations that they comply with the regulations, even if such actions are not incorporated as specific permit terms and conditions. It is not expected that the regulation will result in any cost to the department beyond that currently in the budget. The sources of department funds to carry out this regulation are the general fund and the federal trust (grant money provided by the U.S. EPA under § 105 of the federal Clean Air Act or permit fees charged to affected entities under the permit program). The activities are budgeted under the following program (code)/subprogram (code): (i) Environmental and Resource Management (5120000)/Air Quality Stationary Source Permitting (5122000) and Air Quality Stationary Source Compliance Inspections (5122100) and (ii) Environmental Research and Planning (5130000)/Air Quality Research and Planning (5130700). The costs are expected to be ongoing.</p>
<p><b>f. Projected cost of the regulation on localities</b></p>	<p>The projected cost of the regulation on localities is not expected to be beyond that of other affected entities and is addressed in item c above.</p>
<p><b>g. Beneficial impact the regulation is designed to produce</b></p>	<p>Benefits to the regulated community include more certainty of requirements and added flexibility in business planning. While the case-by-case nature of the regulations makes it impossible to quantify any specific numbers, the regulated community anticipates the realization of a generally beneficial fiscal impact.</p> <p>The general public will benefit from a reduction in</p>

	<p>the health and welfare effects of air pollution, as the new rules encourage the application of air pollution control equipment and work practices. EPA anticipates that there will be a slight reduction in air pollution as a result of the regulations.</p> <p>The department will benefit by diverting its limited resources to projects with a potentially significant impact to the environment rather than on projects with positive or neutral effects to the environment. Permitting resources will be diverted to projects with more of an impact on the environment.</p>
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**Legal Requirements**

*Please identify the state and/or federal source of the legal requirements that necessitate promulgation of the proposed regulation, including (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly bill and chapter numbers, if applicable, and (2) promulgating entity, i.e., the agency, board, or person. Describe the legal requirements and the extent to which the requirements are mandatory or discretionary.*

Promulgating Entity

The promulgating entity for this regulation is the State Air Pollution Control Board.

Identification of Specific Applicable Federal Requirements

On December 31, 2002, EPA promulgated its final rule revising the federal New Source Review (NSR) permitting program for PSD (attainment) and nonattainment areas, by publishing the rule in the Federal Register (67 FR 80185). The new rule, signed by the Administrator on November 22, 2002, affects 40 CFR 51.165 and 40 CFR 51.166. The new rule incorporates five main elements: changes to the method for determining baseline actual emissions; changes to the method for determining emissions increases due to an operational change; provisions to exclude pollution control projects from NSR; provisions for determining applicability of NSR requirements for units designated as clean units; and provisions to allow for compliance with plantwide applicability limits. EPA states in the Federal Register that the final rule revisions become effective on March 3, 2003 and will apply beginning on that date in any area for which EPA is the permit reviewing authority, and in any area for which EPA has delegated the authority to issue permits under the federal program to the state or local agency. In areas where the state or local agency is administering the NSR program under an approved SIP, the state or local agency must adopt and submit revisions to the SIP to reflect the rule revisions no later than January 2, 2006. The revised SIP must be the same as or equivalent to the revised federal program.

Prevention of Significant Deterioration (PSD)

Part C of the Clean Air Act is entitled, "Prevention of Significant Deterioration of Air Quality." As described in section 160, the purpose of Part C is to protect existing clean air resources. Part C requires that the SIP include a PSD program. Section 161 of Part C says:

In accordance with the policy of section 101(b)(1), each applicable implementation plan shall contain emission limitations and such other measures as may be necessary, as determined under regulations promulgated under this part, to prevent significant deterioration of air quality in each region (or portion thereof) designated pursuant to section 107 as attainment or unclassifiable.

This means that the air in areas that meet national clean air standards may not be allowed to become less clean, that is, to deteriorate.

Sections 162 through 169B go on to provide the details of how each state's PSD program is to be designed and operated. Section 165, "Preconstruction Requirements," is the section of the Act that deals with new source review permit programs. This section requires that sources obtain permits demonstrating that they will not contribute to air pollution in excess of that allowed by the Act. Section 165 also specifies what steps are needed to coordinate this permitting process with the Federal Land Managers, who are responsible for maintaining air quality in the cleanest areas of the country: the national parks. Section 165 specifies that new sources locating in attainment areas must meet Best Available Control Technology (BACT), which is defined in § 169. Section 166 requires EPA to regulate certain types of pollutants in PSD areas.

40 CFR 51.166 provides details of what state PSD programs must include. These details include how to revise the program, how and when to assess the program, public participation requirements, and how to amend the program. Section 51.166(a)(1) states, "Each applicable State Implementation plan shall contain emission limitations and such other measures as may be necessary to prevent significant deterioration of air quality." Section 51.166(a)(7) specifies the source applicability for the review of major sources and modifications and defines certain principles to be applied in the administration of the program. The remainder of § 51.166 provides details on what the SIPs must contain.

Significant PSD concepts such as "major stationary source," "major modification," "net emissions increase," "potential to emit," "baseline concentration," and "significant" are defined in § 51.166(b). In § 51.166(c), ambient air increments are found, while ambient air ceilings are specified in § 51.166(d). Area classifications are restricted in § 51.166(e); exclusions from increment consumption are listed in § 51.166(f). Redesignation of Class I, II, or III areas is discussed in § 51.166(g) and stack height requirements are given in § 51.166(h). Exemptions are found in § 51.166(i). Section 51.166(j) covers control technology review, specifically § 51.166(j)(2) and (3) which require that new sources or major modifications must meet BACT as defined in § 51.166(b)(12). Requirements for source impact analysis are given in § 51.166(k). Air quality models are described in § 51.166(l). Preapplication analysis, post-construction monitoring, and operation of monitoring stations are found in § 51.166(m), air quality analysis. Sources must provide information as described in § 51.166(n), as well as additional impact analyses as described in § 51.166(o). Sources that affect federal Class I areas must meet the requirements of § 51.166(p), which also describes the responsibilities of the Federal Land Manager. Public participation requirements are found in § 51.166(q). Section 51.166(r) includes additional information on source obligation, and § 51.166(s) allows for the use of innovative control technologies.

The clean unit test for emissions units that are subject to BACT or LAER is described in § 51.166(t), while clean unit provisions for emissions units that achieve an emission limitation comparable to BACT are covered in § 51.166(u). Pollution control project exclusion procedural requirements are found in § 51.166(v). Finally, the plan must provide for plantwide applicability limits, as described in § 51.166(w)

### Nonattainment

Part D of the Clean Air Act, "Plan Requirements for Nonattainment Areas," describes how nonattainment areas are established, classified, and required to meet attainment. Subpart 1, Nonattainment Areas in General, consists of §§ 171 through 179, and provides the overall framework of what nonattainment plans are to contain, permit requirements, planning procedures, motor vehicle emission standards, and sanctions and consequences of failure to attain. Subpart 2, Additional Provisions for Ozone Nonattainment Areas, consists of §§ 181 through 185, and provides more detail on what is required of areas designated as nonattainment for ozone.

Section 182 (a)(2)(C) sets out the general requirements for new source review programs in all nonattainment areas and mandates a new and modified major stationary source permit program that meets the requirements of §§ 172 and 173 of the Act. Section 172 contains the basic requirement for a permit program, while § 173 contains the specifics which are summarized below.

Section 173(a) provides that a permit may be issued if the following criteria are met:

1. Offsets have been obtained for the new or expanding sources from existing sources so that total allowable emissions (i) from existing sources in the region, (ii) from new or modified sources which are not major emitting facilities, and (iii) from the proposed new source will be sufficiently less than total emissions from existing sources prior to the application for the permit so as to represent reasonable further progress.
2. The proposed source is required to comply with the lowest achievable emission rate (LAER).
3. The owner of the proposed source has demonstrated that all major stationary sources owned or operated by the owner in the state are subject to emission limitations and are in or on a schedule for compliance with all applicable emission limitations or standards.
4. The SIP is being adequately implemented for the nonattainment area in which the proposed source is to be located.
5. An analysis of alternative sites, sizes, production processes, and environmental control techniques for the proposed source demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

Section 173(b) prohibits the use of any growth allowance that is part of a SIP revision in effect prior to the adoption of the 1990 Amendments to the Act for areas designated nonattainment after adoption of the amendments.

Section 173(c) provides that the owner of the proposed new or modified source may obtain offsets only from the nonattainment area in which the proposed source is to be located. Offsets may be obtained from other nonattainment areas whose emissions affect the area where the proposed source is to be located, provided the other nonattainment area has an equal or higher classification and the offsets are based on actual emissions.

Section 173(d) provides that states must promptly submit any control technology information relative to the permit program to EPA for entry into the BACT/LAER clearinghouse.

Section 173(e) provides that the permit program must allow the use of alternative or innovative means to achieve offsets for emission increases due to rocket engine and motor firing and cleaning related to the firing.

A major stationary source is defined for general application in § 302 of the Act as "any facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant." For nonattainment areas defined as serious or worse, § 182(c) specifically defines a major stationary source as a facility emitting fifty tons per year or more; and for nonattainment areas defined as severe or worse, § 182(d) specifically defines a major stationary source as a facility emitting twenty-five tons per year or more. Section 182(f) provides that requirements which apply to major stationary sources of VOCs under the Act shall also apply to major stationary sources of NO<sub>x</sub>.

Section 182(a)(4) sets out the requirements for marginal areas with respect to offset ratios, providing for a minimum ratio of total emissions reduction of VOCs to total increased emissions of VOCs of 1.1 to 1. Likewise § 182(b)(5) sets out the offset requirements for moderate nonattainment areas, specifying the ratio to be at least 1.15 to 1. Accordingly, § 182(c)(10) sets out the offset requirements for serious nonattainment areas, specifying the ratio to be at least 1.2 to 1. Finally, § 182(d)(2) sets out the offset requirements for severe nonattainment areas, specifying the ratio to be at least 1.3 to 1.

Sections 182(c)(6) through (c)(8) contain some additional specifics for serious or worse nonattainment areas concerning the establishment of a de minimis level for expanding existing sources and the allowance of internal offsets as an alternative to the permit requirements. New source permit programs must include provisions to require permits for modifications of all existing sources unless the increase in net emissions from the source does not exceed 25 tons when aggregated with all other net increases in emissions from the source over any period of five consecutive calendar years, including the calendar year in which the increase occurs. The program must also include provisions concerning internal offsets as alternatives to the permit requirements. For sources emitting less than 100 tons per year and applying for a permit to expand, a permit will be required unless the owner elects to offset the increase by a greater reduction in emissions of the same pollutant from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1. If the owner does not choose the option of an internal offset, a permit will be required but the control technology level required will be best available control technology (BACT) instead of lowest achievable emission rate (LAER). For sources emitting 100 tons or more per year and applying for a permit to expand, control technology requirements which constitute LAER will be required unless the owner elects to offset the increase by a greater reduction in emissions of the same pollutant from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1.

40 CFR 51.165 enumerates permit requirements for nonattainment areas. This section describes what permitting requirements are to be contained in the SIP. Specific definitions of key terms such as "potential to emit," "major stationary source," "major modification," "allowable emissions," and "lowest achievable emission rate," are found in § 51.165(a)(1). In § 51.166(a)(2), the SIP must include a preconstruction review program to satisfy the requirements of §§ 172(b)(6) and 173 of the Act, and must apply to any new source or modification locating in a nonattainment area; § 51.166(a)(2) also defines certain principles to be applied in the administration of the program. Section 51.165(a)(3) describes how emissions and emission reductions are to be measured and included in the SIP; § 51.165(a)(4) lists a number of exemptions. Section 51.165(a)(5) stipulates that sources must meet the SIP as well as other state and federal requirements. In accordance with § 51.165(a)(6), owners of projects at existing emissions units at a major stationary source in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase must monitor emissions and record and report certain data; additionally, § 51.165(a)(7) requires that such information be made available for review.

Section 51.165(b) requires that sources meet the requirements of § 110(a)(2)(d)(i). This section also provides significance levels of pollutants which may not be exceeded by any source or modification.

Clean Unit Tests for emissions units that are subject to LAER, which provide the option of using the Clean Unit Test to determine whether emissions increases at a clean unit are part of a project that is a major modification, are described in § 51.165(c); similar provisions for emissions units that achieve an emission limitation comparable to LAER are found in § 51.165(d).

Section 51.165(e) contains the procedural requirements for pollution control project exclusions. Finally, § 51.165 (f) provides requirements for plantwide applicability limits.

#### General Federal Requirements

Sections 109 (a) and (b) of the Clean Air Act (CAA) require EPA to prescribe primary and secondary air quality standards to protect public health and welfare, respectively, for each air pollutant for which air quality criteria were issued before the enactment of the 1970 Clean Air Act. These standards are known as the National Ambient Air Quality Standards (NAAQS). Section 109 (c) requires EPA to prescribe such standards simultaneously with the issuance of new air quality criteria for any additional air pollutant. The primary and secondary air quality criteria are authorized for promulgation under Section 108.

Section 110(a) of the CAA mandates that each state adopt and submit to EPA a plan which provides for the implementation, maintenance, and enforcement of each primary and secondary air quality standard within each air quality control region in the state. The SIP shall be adopted only after reasonable public

notice is given and public hearings are held. The plan shall include provisions to accomplish, among other tasks, the following:

1. establish enforceable emission limitations and other control measures as necessary to meet the applicable requirements of the CAA, including economic incentives such as fees, marketable permits, and auctions of emissions rights;
2. establish a program for the enforcement of the emission limitations and schedules for compliance; and
3. establish programs for the regulation of the modification and construction of any stationary source within areas covered by the plan to assure the achievement of the ambient air quality standards, including a permit program as required by Parts C and D of Title I of the CAA.

40 CFR Part 50 specifies the NAAQS: sulfur dioxide, particulate matter, carbon monoxide, ozone (and its precursors, volatile organic compounds) nitrogen dioxide, and lead.

40 CFR Part 51 sets out requirements for the preparation, adoption, and submittal of SIPs. These requirements mandate that any such plan shall include several provisions, as summarized below.

Subpart F (Procedural Requirements) specifies definitions of key terms, stipulations and format for plan submission, requirements for public hearings, and conditions for plan revisions and federal approval.

Subpart G (Control Strategy) specifies the description of emissions reductions estimates sufficient to attain and maintain the standards, the description of control measures and schedules for implementation, time periods for demonstrations of the control strategy's adequacy, an emissions inventory, an air quality data summary, data availability, special requirements for lead emissions, stack height provisions, and intermittent control systems.

Subpart I (Review of New Sources and Modifications) specifies legally enforceable procedures, public availability of information on sources, identification of responsible agency, and administrative procedures.

Section 51.160 of Subpart I specifies that the plan must stipulate legally enforceable procedures that enable the permitting agency to determine whether the construction or modification of a facility, building, structure or installation, or combination of these will result in either a violation of any part of a control strategy or interference with attainment or maintenance of a national standard and, if such violation or interference would occur, the means by which the construction or modification can be prevented. The procedures must identify types and sizes of facilities, buildings, structures or installations which will be subject to review and discuss the basis for determining which facilities will be subject to review. The procedures must provide that owners of facilities, buildings, structures or installations must submit information on the nature and amounts of emissions and on the location, construction and operation of the facility. The procedures must ensure that owners comply with applicable control strategies after permit approval. The procedures must discuss air quality data and modeling requirements on which applications must be based.

Section 51.161 of Subpart I specifies that the permitting agency must provide opportunity for public comment on information submitted by owners and on the agency's analysis of the effect of construction or modification on ambient air quality, including the agency's proposed approval or disapproval. Section 51.161 also specifies the minimum requirements for public notice and comment on this information.

Section 51.162 of Subpart I specifies that the responsible agency must be identified in the plan.

Section 51.163 of Subpart I specifies that the plan must include administrative procedures to be followed in determining whether the construction or modification of a facility, building, structure or installation will violate applicable control strategies or interfere with the attainment or maintenance of a national standard.

Section 51.164 of Subpart I governs stack height procedures. It requires that such procedures provide a degree of emission limitation required of any source for control of any air pollutant that is not affected by so much of any source's stack height that exceeds good engineering practice (GEP) or by any other dispersion technique. The procedures must provide that before a state issues a permit to a source based on a GEP stack height that exceeds the standard allowable height, the state must notify the public of the availability of the demonstration study and must provide opportunity for public hearing.

Subpart L (Legal Authority) specifies identification of legal authority to implement plans and assignment of legal authority to local agencies.

Section 51.230 of Subpart L specifies that each SIP must show that the state has the legal authority to carry out the plan, including the authority to perform the following actions:

1. adopt emission standards and limitations and any other measures necessary for the attainment and maintenance of the national ambient air quality standards;
2. enforce applicable laws, regulations, and standards, and seek injunctive relief;
3. obtain information necessary to determine whether air pollution sources are in compliance with applicable laws, regulations, and standards, including authority to require recordkeeping and to make inspections and conduct tests of air pollution sources; and
4. prevent construction, modification, or operation of a facility, building, structure, or installation, or combination thereof, which directly or indirectly results or may result in emissions of any air pollutant at any location which will prevent the attainment or maintenance of a national standard.

Section 51.231 of Subpart L requires the identification of legal authority as follows:

1. the provisions of law or regulation which the state determines provide the authorities required under § 51.231 must be specifically identified, and copies of such laws or regulations must be submitted with the plan; and
2. the plan must show that the legal authorities specified in Subpart L are available to the state at the time of submission of the plan.

State Requirements

Code of Virginia § 10.1-1307 A provides that the board may, among other activities, develop a comprehensive program for the study, abatement, and control of all sources of air pollution in the Commonwealth.

Code of Virginia § 10.1-1308 provides that the board shall have the power to promulgate regulations abating, controlling, and prohibiting air pollution throughout or in any part of the Commonwealth in accordance with the provisions of the Administrative Process Act. It further provides that the regulations shall not promote or encourage any substantial degradation of present air quality in any air basin or region which has an air quality superior to that stipulated in the regulations.

**Comparison with Federal Requirements**

*Please identify and describe any requirement of the proposal which is more restrictive than applicable federal requirements. Include a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements or no requirements that exceed applicable federal requirements, include a statement to that effect.*

The proposed regulation amendments are not more restrictive than the applicable legal requirements in the sense that the EPA rule on which the state rule is based allows states some discretion in how the program is implemented. As long as the base elements of the program are included, states are allowed to tailor the federal rules to meet state needs. EPA has stated that specific enforcement of the rules is to be delineated by the states. EPA has also stated that because the overall purpose of the NSR reforms is to encourage the installation of cleaner equipment, obstacles to the implementation of the reforms is considered to be less protective of the environment. Generally, as long as the state rule does not impede a source's ability to use the basic elements of the NSR program, EPA considers the state regulation to be equally as protective as the federal rule. The baseline elements of the EPA program are being included in the Virginia proposed regulation; however, the state is also exercising its discretion to make modifications to the baseline in order to meet state needs.

While many aspects of the EPA rule will likely result in some air quality benefit when applied in Virginia, the Commonwealth's overall air quality situation can benefit from a number of changes to the EPA requirements. § 10.1-1308 of the Code of Virginia states, "The regulations shall not promote or encourage any substantial degradation of present air quality in any air basin or region which has an air quality superior to that stipulated in the regulations." In other words, no regulation may contribute to the deterioration of air quality. Given the uncertainty of specific impacts that implementing the federal rules will have on the areas of the state that are attaining the national standards, it is believed that a certain limitations on some aspects of the federal rules may help ensure that this state-specific need is met.

In addition to ensuring that areas of the state that meet the national standards continue to do so, the Commonwealth is also obligated to actively improve air quality. Currently, approximately one half of the Commonwealth's citizens live in areas that do not attain the national standards. Virginia's nonattainment problems extend beyond its borders as well: a neighboring state has submitted a § 126 petition to EPA claiming that Virginia's air pollution is having a negative impact on its air quality. Visibility problems have been identified in Virginia's Class I (national park) areas. Additionally, nitrogen deposition from airborne emissions is contributing to serious water quality problems in Chesapeake Bay. In this larger context, it is clear that the state needs to take additional steps beyond the immediate legal requirements for nonattainment and PSD areas if larger, statewide issues of air quality are to be addressed. Again, given the uncertainty surrounding the specific impacts of the federal rule, the state rule is exercising its responsibility to consider a somewhat more closely scrutinized process for implementing the basic elements of NSR reform.

The proposed regulation amendments are more restrictive than the applicable legal requirements in the sense that Virginia's proposed changes may impose some relatively minor restrictions to the baseline EPA provisions. For example, the Virginia proposal limits the timeframes from which a source may establish its period of representative operation in order to assure adequate monitoring for compliance and enforcement purposes. Virginia's proposed changes also require some additional recordkeeping and reporting, which may represent an additional upfront burden to sources that may be dissipated later on as the program transpires, and which also provide additional compliance and enforcement support.

Virginia has a legal obligation to incorporate the federal regulations in a manner that will result in equal or better environmental benefit. In order to balance the need to meet Virginia's specific air quality needs with the need to improve permitting certainty and flexibility, a number of revisions to the federal rules are being proposed. The differences between the federal regulations and those proposed by the state are listed below.

1. In the EPA rule, the lookback period for determining past actual emissions is specified as any consecutive 24 months in the previous 10 years. The Virginia proposal uses any consecutive 24 months in the previous 5 years.
2. In the EPA regulation, the period used for establishing each pollutant baseline can be separate for each pollutant. The Virginia proposal requires that it be the same for all pollutants.

3. The EPA regulation does not specify consequences where the owner determines there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and does not obtain a permit. The Virginia proposal specifies how the state will act should the owner fail to make an accurate determination.

4. The EPA regulation requires owners to develop and maintain information to support their determination that a given project is not a part of a major modification may result in a significant emissions increase. The Virginia proposal requires advance notification of the availability of the information prior to beginning actual construction of the project.

5. The EPA rule establishes PAL duration as 10 years; the Virginia proposal contains a 5-year duration.

6. The Clean Unit duration period of 10 years is established by the EPA rule; 5 years is provided in the Virginia proposal.

The proposed regulation amendments include certain provisions that are more restrictive than the federal requirements, but are necessary in order to conform to the Code of Virginia. These provisions are discussed below.

1. The definition of "complete" in 9 VAC 5-80-1615 differs from the federal definition in 40 CFR 51.166(b)(22) in order to implement § 10.1-1321.1 of the Code of Virginia (when application for a permit is considered complete). Section 10.1-1321.1 provides that in order for an application to be considered complete, the applicant must provide the agency with notification from the locality in which the source is to be located that the location and operation of the source are consistent with all applicable ordinances. The requirement is waived if the locality fails to provide the notification within 45 days from receipt of a request from the applicant. However, 40 CFR 51.166 (r)(1) provides that "the plan shall include enforceable procedures to provide that approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the plan and any other requirements under local, State or Federal law." For this reason, the requirement for the notification is not considered a material difference because it places a minor additional requirement upon the applicant and places only a minor administrative burden upon the agency's permit process. This difference is also present in the state definition of "complete application" in 9 VAC 5- 80-2010; there is no federal equivalent for the federal nonattainment program.

2. In 9 VAC 5-80-1615, the definition of "major modification" contains subdivision c(5)(c). This subdivision is not in the federal regulation (40 CFR 51.166(b)(2)) but is included in order to incorporate the provisions of § 10.1-1322.4 of the Code of Virginia (permit modifications for alternative fuels or raw materials). Section 10.1-1322.4 prohibits the agency from requiring any permit or permit amendment (unless required by the federal government) for the use of an alternative fuel or raw material, if the owner demonstrates to the agency that as a result of trial burns at the facility or other facilities or other sufficient data that the emissions resulting from the use of the alternative fuel or raw material supply are decreased. This is considered a material difference because there is no requirement for the owner to make a demonstration in the federal program, thus placing an additional requirement upon the applicant. This difference is also present in the definition of "major modification" in 9 VAC 5-80-2010.

3. The requirement in 9 VAC 5-80-1665 to make permit decisions considering the factors in § 10.1-1307 E of the Code of Virginia goes beyond the federal requirements, in which there is no corresponding federal provision. Section 10.1-1307 E requires the agency in approving permits to consider facts and circumstances relevant to the reasonableness of the activity involved and the regulations proposed to control it, including: (1) the character and degree of injury to, or interference with, safety, health, or the reasonable use of property which is caused or threatened to be caused; (2) the social and economic value of the activity involved; (3) the suitability of the activity to the area in which it is located; and (4) the scientific and economic practicality of reducing or eliminating the discharge resulting from such activity. This is considered a material difference because compliance with the Code creates the potential to affect the permit decision in ways not consistent with the federal program by delaying the agency's

decisionmaking process and placing upon the applicant the need to provide additional information to the agency beyond the federal requirements. This difference is also present in 9 VAC 5-80-2150.

4. 9 VAC 5-80-1775 F 4 and 5 are designed to make the regulation comply with § 10.1-1307.01 of the Code of Virginia, and contain provisions different from the federal requirements of 40 CFR 51.166(q). Section 10.1-1307.01 requires the agency before issuing any permit for the construction of a new major source or for a major modification to an existing source to: (1) publish, or require the applicant to publish, a notice in a local paper at least 30 days prior to the close of any public comment period. The notice must contain a statement of the estimated local impact of the proposed source, which at a minimum shall include information regarding specific pollutants and the total quantity of each which may be emitted and shall list the type and quantity of any fuels to be used; and (2) mail the notice to any locality that is particularly affected. Section 10.1-1307.01 also provides that written comments must be accepted by the agency for at least 15 days after any hearing on the permit. This is not considered a material difference because it places no additional requirement upon the applicant and places only a minor administrative burden upon the agency's permit process. This difference is also present in 9 VAC 5-80-2070 F 3.

The regulations include certain additional provisions governing public participation for which there are no equivalent federal requirements. These are not mandated by state law, and are existing requirements that are not being added or modified as part of the current state action. These provisions are discussed below.

1. 9 VAC 5-80-1775 B through E (and similar provisions in 9 VAC 5-80-2070 A through D) require that applicants notify the public about the proposed source and provide an informational briefing. The briefing is to provide the public with information and answer questions about the operation and potential air quality impacts. As explained below, this provision is essential to the efficient operation of the permit issuing process.

2. 9 VAC 5-80-1775 F 3 (and a similar provision in 9 VAC 5-70-2070 H) allows the agency to conduct an informational briefing at the beginning of the public comment period for the permit. The briefing is to provide the public with information concerning the agency preliminary determination regarding its decision on the permit. The agency is to give the public 30 days notice of the briefing.

The board has historically experienced public objection with regard to the permitting of some industries, primarily due to a lack of understanding of the process and technology associated with the issuance of permits. To foster better understanding by the public of such processes and technologies, the regulation requires that owners of proposed major source conduct briefings shortly after submitting a permit application. These briefings are to be conducted as the application is being reviewed by the agency and thus do not delay issuance of the permit. The regulation also requires the department to conduct briefings at least one day prior to the beginning of the public comment period to aid in this effort.

At the time the initial regulation was being developed, the board, the department, the regulated community, and the general public had experienced a number of controversial permit applications that lengthened the permitting process. The regulation therefore required source owners to include briefings in order to reduce public concern generated by misinformation and to foster prompt resolution of all public concerns. Every care was taken to ensure that the briefing process would not be unduly burdensome. By addressing and resolving public concerns early in the process, the briefings: (i) reduce the time necessary to process an application, (ii) minimize or eliminate the possibility of expensive and time-consuming controversy, (iv) provide useful input to the source as well as the department and the board, and (iv) enable a positive relationship between a source and the community, thereby creating an environment in which industrial development is encouraged, and thereby improving the local and state economy.

**Need**

*Please explain the need for the new or amended regulation and the potential consequences that may result in the absence of the regulation. Detail the specific reasons the regulation is essential to protect*

*the health, safety or welfare of citizens. Discuss the goals of the proposal and the problems the proposal is intended to solve.*

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#### Identification of Specific Planning Requirements Establishing the Need

The current regulations governing major NSR may need to be amended in order to meet the new requirements of a rule promulgated by U.S. EPA. EPA's major NSR reform rule incorporates five main elements: (i) changes to the method for determining baseline actual emissions; (ii) changes to the method for determining emissions increases due to an operational change; (iii) provisions for PCPs; (iv) provisions for Clean Units; and (v) provisions for PALs.

#### Prevention of Significant Deterioration (PSD)

The PSD program is designed to protect air quality in areas where the air is cleaner than required by the NAAQS. The program has three classifications for defining the level of allowable degradation: Class I is the most stringent classification, allowing for little additional pollution, while Class III allows the most. All of Virginia is classified at the moderate level, Class II, with the exception of two Class I federal lands.

The primary control measure of the PSD program is new source review. Prior to construction or expansion of an industrial facility, a permit must be issued that ensures that the facility will not emit pollutants in sufficient quantity to make a significant contribution to the deterioration of air quality or to violate the NAAQS. Additionally, the owner must provide an analysis of the impairment to air quality related values (including visibility) that would occur as a result of the source or modification. The permit application and the department review and analysis must be subject to a public hearing prior to issuing the permit. The facility must use the best available control technology to control emissions. If the facility is to be located near a Class I area, the federal land manager (FLM) is involved in the review process. Also in such cases, additional data with respect to impact on the Class I area is required. Any disagreements with the FLM must be addressed prior to releasing the application and analysis to public comment.

#### Nonattainment

When concentrations of ambient air pollution exceed the federal standard the area is considered to be out of compliance and is designated as "nonattainment." Numerous counties and cities within the Commonwealth have at one time been identified as ozone nonattainment areas according to the Act. Currently, one area continues to be designated nonattainment for the 1-hour ozone standard, while a number of new areas will be designated nonattainment for the 8-hour standard.

The Act has a process for evaluating the air quality in each region and identifying and classifying each nonattainment area according to the severity of its air pollution problem for ozone. There are five nonattainment area classifications called marginal, moderate, serious, severe and extreme. Marginal areas are subject to the least stringent requirements and each subsequent classification (or class) is subject to successively more stringent control measures. Areas in a higher classification of nonattainment must meet the mandates of the lower classifications plus the more stringent requirements of its own class. If a particular area fails to attain the federal standard by the legislatively mandated attainment date, EPA is required to reassign it to the next higher classification level (denoting a worse air quality problem), thus subjecting the area to more stringent air pollution control requirements.

Permits issued in nonattainment areas require the facility owner to apply control technology that meets the lowest achievable emission rate and to obtain emission reductions from existing sources. The emission reductions must offset the increases from the proposed facility by the ratio specified in the Act for that particular nonattainment classification. The offset ratio for ozone nonattainment areas classified as marginal is 1.1 to 1, for moderate areas 1.15 to 1, for serious areas 1.2 to 1, and for severe areas 1.3 to 1. For areas with no classification, the offset ratio is 1 to 1. For all other pollutants, the offset ratio is 1 to 1.

General Planning Requirements

Among the primary goals of the Clean Air Act (Act) are the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and the prevention of significant deterioration (PSD) of air quality in areas cleaner than the NAAQS.

The Act gives EPA the authority to establish the NAAQS, which are designed to protect the health of the general public with an adequate margin of safety. The NAAQS establish the maximum limits of pollutants that are permitted in the outside ambient air. The Act requires that each state submit a plan (called a State Implementation Plan or SIP), including any laws and regulations necessary to enforce the plan, showing how the air pollution concentrations will be reduced to levels at or below these standards (i.e., attainment). Once the pollution levels are within the standards, the plan must also demonstrate how the state will maintain the air pollution concentrations at reduced levels (i.e., maintenance). The Virginia SIP was submitted to EPA in early 1972. Many revisions to the SIP have been made since the original submittal in 1972. The Clean Air Act is specific concerning the elements required for an acceptable SIP. If a state does not prepare a SIP, or EPA does not approve a submitted SIP, then EPA itself is empowered to take the necessary actions to attain and maintain the air quality standards. Generally, the SIP is revised, as needed, based upon changes in the federal Clean Air Act and its requirements.

The heart of the SIP is the control strategy. The control strategy describes the measures to be used by the state to attain and maintain the air quality standards. There are three basic types of control measures: stationary source control measures, mobile source control measures, and transportation source control measures. Stationary source control measures are directed at emissions primarily from commercial/industrial facilities and operations. Mobile source control measures are directed at tailpipe and other emissions from motor vehicles, and transportation source control measures affect motor vehicle location and use.

A key control measure for managing the growth of new emissions is to require preconstruction review of new major facilities or major modifications to existing ones. This review is accomplished through a permit program for new and modified stationary sources. The program requires that owners obtain a permit prior to the construction of a new industrial or commercial facility or the modification (physical change or change in the method of operation) of an existing one. Program requirements differ according to the facility's potential to emit a certain amount of a specific pollutant and the air quality status of the area where the facility is or will be located. Requirements for facilities considered major due to their potential to emit a specified pollutant are more stringent than for less polluting facilities. Requirements for major facilities in nonattainment areas are considerably more stringent than for those in areas which meet the standard.

**Alternatives**

*Please describe any viable alternatives to the proposal considered and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the action.*

As provided in the public participation procedures of the State Air Pollution Control Board, the department included, in the Notice of Intended Regulatory Action, a description of the department's alternatives and a request for comments on other alternatives and the costs and benefits of the department's alternatives or any other alternatives that the commenters provided.

Following the above, alternatives to the proposed regulation amendments were considered by the department. The department determined that the first alternative is appropriate, as modified by the options listed in items 3, 4, 8, 12 and 13 below. This was determined to be the least burdensome and least intrusive approach that fully meets the overall purpose of the regulation in the least burdensome way possible while addressing issues specific to Virginia. The alternatives considered by the department,

along with the reasoning by which the department has rejected any of the alternatives being considered, are discussed below.

1. Amend the basic regulations without modification to satisfy the baseline provisions of the EPA major NSR reform regulations and policies. This option was not chosen because it does not meet NSR needs specific to Virginia.
2. Take no action to amend the regulations and continue to use the existing program. This option was not chosen because Virginia must meet the basic federal requirements of major NSR reform in order to meet its obligations under the Clean Air Act.
3. Make alternative regulatory changes to determine baseline emissions by using a lookback period based on any consecutive 24-month period within the most recent 5 years of operation instead of 10 years. This option was chosen as a reasonable compromise that would allow permitting flexibility while protecting enforceability and maintaining clean air protections.
4. Make alternative regulatory changes to determine and specify consequences of exceeding projected emissions. This option was chosen because EPA provides the states with some flexibility in delineating enforcement procedures, and staff identified a need for additional specifics in order to facilitate compliance and enforcement needs.
5. Make alternative regulatory changes to provisions for projected actual emissions by differentiating the projected emissions resulting from the physical or operational change from demand growth. This option was not chosen because there is no reliable means of making this type of determination.
6. Make alternative regulatory changes to provisions for malfunctions by excluding them from the determination of baseline actual emissions and projected actual emissions. This option was not chosen because inclusion of malfunctions is explicitly necessitated by the structure established for determining baseline and projected actual emissions.
7. Make alternative regulatory changes to netting requirements for sources by requiring sources to "net in" as well as net out. This option was not chosen because there is no reliable means of accomplishing such a task.
8. Make alternative regulatory changes to the baseline emissions for plantwide applicability limits (PALs) based on a lookback period of 5 years of operation instead of 10, and a duration of 5 years instead of 10. This option was chosen as a reasonable compromise that would allow permitting flexibility while protecting enforceability and maintaining clean air protections.
9. Make alternative regulatory changes to PAL renewal based on emissions at the time of the renewal, and include review of significant changes to the overall airshed and the potential affect on NAAQS or PSD increment. This option was not chosen because there are existing provisions in the state regulations protecting the NAAQS and PSD increment.
10. Make alternative regulatory changes to pollution control project (PCP) provisions to include the "primary purpose" test (that is, the explicit purpose of the PCP should be to reduce air pollution). This option was not selected because the primary objective in allowing for a PCP exclusion is to offer NSR relief for projects that create a net environmental benefit, and thus the source's immediate motivation for undertaking their project is not relevant as long as the ultimate outcome is beneficial to air quality.
11. Make alternative regulatory changes to how "substantially as effective" Clean Unit determinations should be made. This option was not selected because, as proposed, this test will ensure determinations that meet both control technology and air quality tests, as well as allow sources to implement the controls that are best suited to their individual processes and encourage well-controlled, innovative sources to benefit from the Clean Unit designation.

12. Make alternative regulatory changes to the Clean Unit duration period from 10 years to five. This option was chosen as a reasonable compromise that would allow permitting flexibility while protecting enforceability and maintaining clean air protections.

13. Make alternative regulatory changes to the period used for establishing each pollutant baseline by requiring that it be the same for all pollutants rather than separate for each pollutant. This option was selected because it recognizes that emission levels are affected by business cycles, and allows a source to select the most **representative** 24-month period for the facility.

**Public Comment**

*Please summarize all public comment received during 30-day period following the publication of the NOIRA, and provide the agency response. If no public comment was received, please so indicate.*

<b>Commenter</b>	<b>Comment</b>	<b>Agency response</b>
Dominion, DuPont, Honeywell, International Paper (IP), Merck, Virginia Manufacturers Association (VMA)	General support for EPA regulations. The 5 innovative changes to NSR (a "long lookback" approach to setting baseline actual emissions, a "past actual emissions to projected actual emissions" applicability test, PALs, Clean Units, and a PCP exemption) will provide significant benefits to Virginia's citizens and businesses. Federal NSR reform will streamline and simplify NSR, provide certainty about NSR applicability, compliance and enforcement, and reduce unnecessary permitting burdens.	The proposal includes, with some modification, the 5 primary elements of NSR reform.
Dominion	In addition to the basic NSR package, rulemaking for EPA's routine maintenance, repair and replacement (RMRR) rules should proceed.	That portion of the EPA rules has been stayed by court order. Given that EPA may significantly change the RMRR rules, it is not prudent to proceed with any rulemaking while the rule is in abeyance.
DuPont	Extended economic downturns result in a drop in emissions that may later have a negative impact on NSR permitting. We recently had to undergo NSR review because emissions from the project were compared to emissions from two unusually low production years. Had the long lookback approach been in effect, we would have been able to use a more representative period in this calculation.	The proposal includes, with some modification, the long lookback approach.
DuPont	Our facilities' actual emissions are typically below their potential emissions. The past- actual-to- future-potential test can trigger NSR even if the planned changes would not cause an emissions increase. A	The proposal includes the past-actual-to-projected-actual applicability test.

	recent project was forced to use future potential emissions that did not reflect reality from a production standpoint.	
DuPont	Adoption of a differing set of regulations from the federal would result in a confusing regulatory environment.	The proposal includes, with some modification, the 5 primary elements of NSR reform.
International Paper (IP)	IP has not implemented several projects which would improve air quality, reduce fuel use, improve product quality, and reduce operating costs in order to avoid lengthy and costly NSR permitting analyses. Some of these projects result in emissions decreases, but the potential-to-actual evaluation results in unrealistic emissions increases.	The proposal includes the past-actual-to-projected-actual applicability test.
IP	Implementation of the PCP exclusion will help IP implement some projects which have environmental benefits, including some projects that are driven by new regulatory requirements. For example, IP applied for a PCP exemption for an environmentally beneficial MACT project but due to collateral emissions, an NSR permit was necessary. Upcoming MACT requirements will require physical modifications to bring IP into compliance; it is imperative that PCPs be allowed to avoid time-consuming permitting that may endanger the plant's ability to comply with the federal standards in time.	The proposal includes the PCP exclusion.
Merck	The previous NSR program unnecessarily complicated the permitting process to no environmental benefit. NSR reforms, particularly PALs, have been demonstrated through Merck's Project XL to mitigate some of these problems.	The proposal includes PAL provisions.
Southern Environmental Law Center (SELC)	The new federal rule does not provide an enforcement mechanism similar to the one found in the non-EUSGUs. An actual-to-projected-actual applicability test for all sources should also include provisions making projected actual emission enforceable by permit.	The proposal retains most of EPA's original provisions actual-to-projected-actual applicability test. Additional provisions have been added to specify consequences of exceeding projected emissions for enforcement purposes.
SELC	The state rule should not include the hybrid test for projects that	The proposal retains EPA's original provisions because they are the most effective means of

	involve multiple types of emissions units.	achieving the federal requirements.
SELC	Emissions sources should not be allowed to look back 5-10 years to select an emissions baseline period; 2 years should apply.	The proposal includes a 5-year lookback period.
SELC	The lookback period for calculating baseline emissions should run from the date of the permit application or preconstruction notice rather than the date construction begins on a modification.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	The same baseline period should be used for all pollutants.	The proposal requires that the baseline period be used for all pollutants.
SELC	Emissions from malfunctions should not be included in baseline calculations.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	Baseline emissions from EUSGUs should be adjusted downward to account for emissions limitations implemented since the baseline period.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	Baseline emissions from EUSGUs and non-EUSGUs should be adjusted downward to account for emissions limitations that are part of a MACT standard.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	A source should not be allowed to exclude emissions it attributes to demand growth from the calculation of projected actual emissions.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	Projected actual emissions should represent maximum emissions that can reasonably be predicted, regardless of when they occur.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	An actual-to-projected-actual applicability test for all sources should also include provisions making projected actual emission enforceable.	The proposal retains most of EPA's original provisions actual-to-projected-actual applicability test. Additional provisions have been added to specify consequences of exceeding projected emissions for enforcement purposes.
SELC	Preconstruction notice should be required for all projects sources contend are not subject to NSR.	The proposal includes additional provisions to require preconstruction notice for all projects sources contend are not subject to NSR for enforcement purposes.
SELC	Records of baseline and projected actual emissions calculations, as well as records of actual emissions, must be maintained for an adequate period to allow effective enforcement.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	Sources should be required to report post-change emissions and to recalculate applicability annually.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	If a demand growth exclusion is	The proposal retains EPA's original provisions

	included in the state rule, it should include recordkeeping requirements documenting emissions excluded from projected actual emissions and post-change actual emissions, and justifications for those exclusions.	because they are the most effective means of achieving the federal requirements.
SELC	If a source fails to keep records of annual post-change emissions for any year, actual emissions for that year should equal the emissions unit's PTE.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	Major modifications should be required to "net in" as well as "net out."	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	The contemporaneous period of a net emissions increase should be no more than 3 years.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	A single baseline for all units and all pollutants should be used for netting purposes.	The proposal includes a single baseline for all pollutants.
SELC	"Replacement unit" should be defined as a new emissions unit until it has 2 years of operating history.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	The criteria for measuring whether a PCP is environmentally beneficial should be clearly stated.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	A PCP exemption should not apply to the replacement or reconstruction of an existing emissions unit.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	Presumed PCPs should be rebuttable.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	STAPPA/ALAPCO's recommendations relating to combustion of sulfur-bearing compounds should be included in any list of presumed PCPs.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	Public participation should be required in review of a presumed PCP.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	An emissions unit should not qualify for a Clean Unit exemption unless it has received a major NSR permit within the last 5 years.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	Clean Unit status should not be retained for more than 5 years after the most recent BACT/LAER review.	The proposal includes a 5-year duration for Clean Unit status.
SELC	An emissions unit should lose Clean Unit status immediately upon the redesignation of the area in which it is located to nonattainment.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	An emissions unit should be allowed to qualify for Clean Unit	The proposal includes a 5-year lookback, which should be sufficiently recent.

	status only if it has undergone a recent BACT or LAER determination.	
SELC	A PAL baseline should be contemporaneous with the PAL application and a single baseline should be used for all regulated pollutants.	The proposal includes a single baseline for all pollutants.
SELC	Malfunction emissions should not be included in a PAL baseline.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	Any new emissions unit constructed during the PAL lifetime should be required to install BACT.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements; however, nothing in those provisions nullifies minor new source review, which imposes BACT.
SELC	PAL sources should continue to comply with synthetic minor limits taken to avoid NSR.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements; however, nothing in those provisions nullifies minor new source review, which provides limits for synthetic minors.
SELC	The test for determining whether a PAL limit should be increased during the PAL term should be based on emissions from major units determined by conducting a new BACT/LAER analysis.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
SELC	A PAL should only be renewed at a level equal to emissions in the 2 years immediately preceding the renewal application, and the board should retain the discretion to adopt a lower PAL level if warranted by other air quality needs.	The proposal retains EPA's original provisions because they are the most effective means of achieving the federal requirements.
Virginia Manufacturers Association (VMA)	The old approach made it difficult to use a business cycle downturn to justify the selection of a baseline period other than 2 years immediately preceding the change. This results in "confiscation" of a facility's productive capacity. The long lookback will address this problem with no adverse environmental impact.	The proposal includes a 5-year lookback period.
IP, VMA	Manufacturing plants typically operate below full capacity, which means their actual emissions are below their potential. The past-actual-to-future-potential test can trigger NSR applicability even if the planned change would not create an increase in emissions.	The proposal includes the past-actual-to-projected-actual applicability test.
VMA	The new applicability test eliminates a perverse incentive to maintain	The proposal includes the past-actual-to-projected actual applicability test.

	their actual emissions as close as possible to their PTE in order to minimize the change of triggering major NSR. Sources may forego emission control or prevention projects because they will magnify the difference between past actual and future potential emissions.	
IP, VMA	PALs provide important operational flexibility for companies that must respond quickly to new product and market demands. PALs also provide air quality benefits by capping emissions at levels below those currently allowed and by encouraging sources to further reduce emissions beneath the caps.	The proposal includes, with some modifications, provisions for PALs.
IP, VMA	The Clean Unit approach for units which are already meeting BACT or LAER will provide businesses with operational flexibility without jeopardizing air quality.	The proposal includes, with some modifications, provisions for Clean Units
IP, VMA	The old NSR rules discourage modifications that would have a net beneficial impact to the environment in spite of a collateral emissions increase. The PCP exclusion removes this disincentive.	The proposal includes, with some modifications, provisions for PCPs

### Impact on Family

*Please provided an assessment of the impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: (1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; (2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; (3) strengthen or erode the marital commitment; and (4) increase or decrease disposable family income.*

It is not anticipated that these regulation amendments will have a direct impact on families. However, there will be positive indirect impacts in that the regulation amendments will ensure that the Commonwealth's air pollution control regulations will function as effectively as possible, thus contributing to reductions in related health and welfare problems.

### Detail of Changes

*Please detail all changes that are being proposed and the consequences of the proposed changes. Detail all new provisions and/or all changes to existing sections.*

*If the proposed regulation is intended to replace an emergency regulation, please list separately (1) all changes between the pre-emergency regulation and the proposed regulation, and (2) only changes made since the publication of the emergency regulation.*

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change and rationale
Article 4 of 9 VAC 5 Chapter 50			
270 B and C		Control technology requirements for achieving the lowest achievable emissions rate.	Revised. Federal requirement.
280 B and C		Control technology requirements for achieving best available control technology.	Revised. Federal requirement.
Article 6 of 9 VAC 5 Chapter 80			
1100 G		Exemption exception.	Removed. Consistency with removal of 80-1310.
1110 C, Terms defined.		See below.	See below.
applicable federal requirement, major NSR program, minor NSR program		Terms defined.	Revised. Correction.
emissions cap		Terms defined.	Revised. Consistency with state permit program.
pollution control projects, targeted regulated air pollutants		Terms defined.	Definitions removed. Federal requirement.
1310		Pollution control projects.	Repealed. Federal requirement.
Article 8 of 9 VAC 5 Chapter 80			
1700 A	1605 A	Applicability.	Revised. Federal requirement.
1700 C	1605 C	Applicability.	Revised. Federal requirement.
1700 D	1605 D	Applicability.	Revised. State requirement.
1700 E	1605 E	Applicability.	Revised. Federal requirement.
1700 F	1605 F	Applicability.	Revised. Renumbering.
1700 G		Circumvention.	Relocated from 1960. State requirement.
	1605 H through J	Applicability.	Added. Federal requirement.
	1605 K, L	Applicability.	Added. State requirements.
1710 B	1615 B	Application of definitions to the article.	Revised. State requirements.
1710 C, Terms defined.	1615 C	See below.	See below.

<p>baseline concentration, BACT, complete, construction, emissions unit, federally enforceable, major modification, major stationary source, necessary preconstruction approvals or permits, secondary emissions, significant, stationary source</p>		<p>Terms defined.</p>	<p>Revised. State and federal requirements.</p>
<p>effective date of this revision, EUSGU, enforceable as a practical matter, federal operating permit, federal operating permit program, LAER, major NSR permit, major NSR permit program, minor NSR permit, minor NSR permit program, NSR permit, NSR permit program, project, regulated NSR pollutant, state operating permit, state operating permit program</p>		<p>Terms defined.</p>	<p>Added. State and federal requirements.</p>
<p>actual emissions, clean coal technology, clean coal technology demonstration project, net emissions increase</p>		<p>Terms defined.</p>	<p>Revised. Federal applicability requirements for establishing baselines and projected emissions.</p>

baseline actual emissions, projected actual emissions, reactivation of a very clean coal-fired EUSGU, repowering, temporary clean coal technology demonstration project		Terms defined.	Added. Federal applicability requirements for establishing baselines and projected emissions.
actuals PAL for a major stationary source, allowable emissions, potential to emit,		Terms defined.	Revised. Federal PAL requirements.
CEMS, CERMS, CPMS, major emissions unit, PAL, PAL effective date, PAL effective period, PAL major modification, PAL permit, PAL pollutant, PEMS, significant emissions increase, significant emissions unit, small emissions unit		Terms defined.	Added. Federal PAL requirements.
pollution control projects (PCPs)		Terms defined.	Added. Federal PCP requirements.
clean unit, pollution prevention, RACT		Terms defined.	Added. Federal Clean Unit requirements.
1720 A	1625 A	General requirement.	Revised. Federal requirement.
1720 B	1625 B	General requirement.	Added. Federal requirement.
1720 C	1625 C	General requirement.	Revised. State requirement.
1720 D	1625 D	General requirement.	Revised. Section renumbering.
1720 E	1625 E	General requirement.	Revised. State requirement.
1720 F, G, H	1625 F, G, H	General requirements.	Added. State requirement.
1730	1635	Ambient air increments.	Renumbered.
1740	1645	Ambient air ceilings.	Renumbered.
1750 A	1655 A	Applications.	Revised. State requirement.
1750 C	1655 C	Applications.	Revised. State requirement.
1750 D		Applications.	Repealed. State requirement.
1750 F		Applications.	Relocated to definition of "complete."
1760	1665	Local zoning requirements.	Revised. State requirement.
1770 A	1675 A	Performance testing.	Revised. State requirement.
1770 B		Performance testing.	Deleted.
1770 C	1675 B	Performance testing.	Revised. State requirement.

1770 D		Performance testing.	Deleted. State requirement.
1770 E	1675 C	Performance testing.	Revised. State requirement.
1770 F	1675 D	Performance testing.	Revised. State requirement.
	1675 E	Performance testing.	Added. State and federal requirements.
1780 B	1685 B	Stack heights.	Added. Federal requirement.
1790 A		Exemptions.	Deleted. Federal requirement.
1790 B		Exemptions.	Deleted. Federal requirement.
1790 C		Exemptions.	Deleted. Federal requirement.
1790 D	1695 A	Exemptions.	Revised. Federal requirement.
1790 E	1695 B	Exemptions.	Revised. State requirement.
1790 F	1695 C	Exemptions.	Revised. Renumbered.
1790 G	1695 D	Exemptions.	Revised. Federal requirement; renumbering.
1790 H	1695 E	Exemptions.	Revised. Corrections; renumbering.
1790 I		Exemptions.	Deleted. Federal requirement.
1800 A	1705 A	Control technology review.	Revised. Federal requirement.
1800 B	1705 B	Control technology review.	Revised. Federal requirement.
1800 C	1705 C	Control technology review.	Revised. Federal requirement.
1810 A-B	1715 A	Source impact analysis.	Revised. Federal requirement.
	1715 B	Source impact analysis.	Added. Federal requirement.
1820 B	1725 B	Air quality models.	Renumbered.
1830	1735	Air quality analysis.	Revised. Correction, renumbering.
1840	1745	Source information.	Renumbering.
1850	1755	Additional impact analyses.	Renumbering.
1860	1765	Federal class I areas.	Revised. Correction, renumbering.
1870 A	1775 A	Public participation.	Revised. State and federal requirements.
1870 F	1775 F	Public participation.	Revised. State requirement.
1870 G	1775 G	Public participation.	Added. State requirement.
1880 A	1785 A	Source obligation.	Revised. Federal requirement.
1880 B	1785 B	Source obligation.	Revised. Federal requirement.
	1785 C	Source obligation.	Added. Federal requirement.
1880 C	1785 D	Source obligation.	Revised. Federal requirement.
1880 D	1785 E	Source obligation.	Added. State requirement.
1890	1795	Environmental impact statements.	Revised. Renumbering.
1900	1805	Disputed permits.	Revised. Corrections.
1920	1825	Innovative control technology.	Revised. Renumbering.
	1835	Clean Unit test for units subject to BACT or LAER	Added. Federal requirements for Clean Units.
	1845	Clean Unit test for units comparable to BACT.	Added. Federal requirements for Clean Units.
	1855	PCP requirements.	Added. Federal requirements for PCPs.
	1865	PALs.	Added. Federal requirements for PALs.
	1925	Changes to permits.	Added. State requirement.
	1935	Administrative permit amendments.	Added. State requirement.
	1945	Minor permit amendments.	Added. State requirement.

	1955	Significant permit amendments.	Added. State requirement.
	1965	Reopening for cause.	Added. State requirement.
1930		Reactivation and permanent shutdown.	Repealed. State requirement.
1940	1975	Transfer of permits.	Revised. State requirement.
1950 A-D	1985 A-D	Permit invalidation, suspension, revocation and enforcement.	Revised. Federal requirement.
1950 E-J	1985 E-J	Permit invalidation, suspension, revocation and enforcement.	Revised. State requirement.
1960		Circumvention.	Relocated to 1700 G.
1970		Review and confirmation.	Repealed. State requirement.
	1995	Existence of permit no defense.	Added. State requirement.
Article 9 of 9 VAC 5 Chapter 80			
2000 A		Applicability	Revised. Federal requirement.
2000 E		Applicability	Revised. Federal requirement.
2000 F-G		Applicability	Revised. Federal requirement.
2000 I-K		Applicability.	Revised. Federal requirement.
2000 L-M		Applicability	Revised. State requirement.
2010 C, Terms defined.		See below.	See below.
emissions cap, emissions unit, enforceable as a practical matter, federally enforceable, major modification, major stationary source, necessary preconstruction approvals or permits, regulated NSR pollutant, secondary emissions, state operating permit program, stationary source			Revised. State and federal requirements.

<p>BACT, effective date of this revision, EUSGU, Federal Land Manager, federal operating permit, federal operating permit program, major NSR permit, major NSR permit program, minor NSR permit, minor NSR permit program, NSR permit, NSR program, PSD program, project, state operating permit</p>			<p>Added. State and federal requirements.</p>
<p>actual emissions, net emissions increase</p>			<p>Revised. Federal applicability requirements for establishing baselines and projected emissions.</p>
<p>baseline actual emissions, clean coal technology, clean coal technology demonstration project, projected actual emissions, temporary clean coal technology demonstration project</p>			<p>Added. Federal applicability requirements for establishing baselines and projected emissions.</p>
<p>potential to emit</p>			<p>Revised. Federal PAL requirements.</p>

actuals PAL for a major stationary source, allowable emissions, CEMS, CERMS, CPMS, major emissions unit, PAL, PAL effective date, PAL effective period, PAL major modification, PAL permit, PAL pollutant, PEMS, significant emissions increase, significant emissions unit, small emissions unit			Added. Federal PAL requirements.
pollution control project (PCP)			Added. Federal PCP requirements.
Clean Unit, pollution prevention			Added. Federal Clean Unit requirements.
minor NSR, qualifying pollutant, reconstruction			Removed. State requirement.
2020 A		General requirement.	Revised. Federal requirement.
2020 C		General requirement.	Added. State requirement.
2020 D-G		General requirement.	Revised. Renumbering; state requirement.
2040		Application information required.	Revised. State and federal requirements.
2050		Standards and conditions for granting permits.	Revised. Federal requirement.
2060		Action on permit application.	Revised. State requirement.
2070		Public participation.	Revised. State requirement.
2090		Application review and analysis.	Revised. Federal requirement.
	2091 A-D	Source obligation.	Added. Federal requirement.
	2091 E	Source obligation.	Added. State requirement.
2110		Interstate pollution abatement.	Revised. Federal requirement.
2120 D-G		Offsets.	Revised. State requirement.
2120 L-N		Offsets.	Added. Federal requirement.
2140		Exception.	Revised. State requirement.
	2141		Added. Federal requirements for Clean Units
	2142		Added. Federal requirements for Clean Units.
	2143		Added. Federal requirements for PCPs.

	2144		Added. Federal requirements for PALs.
2180		Permit invalidation, suspension, revocation and enforcement.	Revised. State and federal requirements.
2210 B		Administrative permit amendments.	Revised. State requirements.
2240		Reopening for cause.	Revised. State requirements.

**Periodic Review**

*Please supply a schedule setting forth when the agency will initiate a review and re-evaluation to determine if the regulation should be continued, amended, or terminated. The specific and measurable regulatory goals should be outlined with this schedule. The review shall take place no later than four years after the proposed regulation is expected to be effective.*

The department will initiate a review and re-evaluation of the regulation to determine if it should be continued, amended, or terminated within four years after its effective date.

The specific and measurable goals the proposed regulation amendments are intended to achieve are as follows:

1. To protect public health and welfare with the least possible cost and intrusiveness to the citizens and businesses of the Commonwealth.
2. To prevent the construction, modification, or operation of major facilities that will prevent or interfere with the attainment or maintenance of any ambient air quality standard.
3. To ensure that major new facilities or major expansions to existing facilities will be designed, built, and equipped to operate without causing or exacerbating a violation of any ambient air quality standard.
4. To ensure that major new facilities or major expansions to existing facilities will be designed, built, and equipped to comply with case-by-case control technology determinations and other requirements.
5. To ensure that there is no significant deterioration of air quality in Virginia's national parks and throughout the Commonwealth.
6. To ensure that emission increases are offset by emission reductions from existing facilities by an equal or greater amount.

**Clarity**

*Please provide a statement indicating that the agency, through examination of the regulation and relevant public comments, has determined that the regulation is clearly written and easily understandable by the individuals and entities affected.*

The department, through examination of the regulation and relevant public comments, has determined that the regulation is clearly written and easily understandable by the individuals and entities affected.

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